KEY ENVIRONMENTAL INCORPORATED

Via FTP Site Submittal and/or Federal Express

February 13, 2015

Alison Hess, Standard Chlorine Chemical Co. RPM
U.S. Environmental Protection Agency, Region 2
Special Projects Branch
Emergency and Remedial Response Division
290 Broadway, 19th Floor
New York, New York 10007-1866

Re: Monthly Progress Report – January 2015
Standard Chlorine Chemical Co. Inc. Site
Kearny, Hudson County, New Jersey

Dear Ms. Hess:

On behalf of the Performing Parties Group (Group), please find enclosed one hard copy of the January 2015 Monthly Progress Report for the Standard Chlorine Chemical Co. Inc. (SCCC) Site located in Kearny, New Jersey. This report has been prepared to address the monthly reporting requirements listed in Section V (Task 4 – Implementation of the RI/FFS Work Plan) of a Remedial Investigation/Focused Feasibility Study (RI/FFS) Statement of Work (SOW) issued by the United States Environmental Protection Agency (EPA) as Appendix A of an Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Focused Feasibility Study (Agreement) for the SCCC Site. An electronic copy of the report has been uploaded to the FTP site that has been established for the SCCC Site.

Please feel free to contact me at (412) 279-3363 if you have questions concerning this submittal.

Sincerely,

James Zubrow

James Zubrow, P.G.
Project Manager

cc: Jay Nickerson – NJDEP (via Federal Express)
Leena Raut – EPA (electronic copy)
Frances Zizila – EPA (electronic copy)
Mitch Brourman – Beazer c/o TRMI (electronic copy)
Teresa Jordan – Tierra (electronic copy)
Nelson Olavarria – Cooper Industries, LLC (electronic copy)
John McTigue – The Isosceles Group (electronic copy)

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STANDARD CHLORINE CHEMICAL CO. INC. SUPERFUND SITE
MONTHLY PROGRESS REPORT
JANUARY 2015

I. Actions Completed During the Reporting Period (January 2015)

Revisions were made to the Baseline Human Health Risk Assessment (BHHRA) Report to address comments from the U.S. Environmental Protection Agency (EPA). The revised BHHRA Report was submitted to EPA and the New Jersey Department of Environmental Protection (NJDEP) on December 5, 2014. EPA issued approval of the BHHRA on January 22, 2015.

The implementation of the Cultural Resources Survey Work Plan continued with the submittal of draft documents and exhibit to EPA on January 19, 2015.

Preparation of the Remedial Investigation Report continued.

Preparation of the Development and Screening of Remedial Alternatives Technical Memorandum was initiated.

Efforts continued to gain access to the New Jersey Department of Transportation (NJDOT) right-of-way to the south of the Site, as necessary, to facilitate the investigation of dichlorobenzenes in a localized area south of the Site and outside of the barrier wall (scope of work previously approved by EPA). KEY has secured Highway Occupancy Permits from NJDOT and is awaiting receipt from NJDOT of an access agreement which is necessary for work to proceed.

An application to renew the NJPDES application for the Hydraulic Control Treatment System (HCTS) was submitted to the NJDEP on January 30, 2015.

II. Results of Sampling, Tests and Data Received by Respondents

No data were received by Respondents during the reporting period, except for routine data associated with the operations and maintenance of Hydraulic Control Treatment System (HCTS) discussed in the attached quarterly O&M Status Report.

III. Work Planned for the Next Two Months (February and March 2015)

Implementation of the Cultural Resources Survey Work Plan will continue with the finalization of the documents and exhibit upon receipt of any input from EPA or other interested parties.

The RI Report and the Development and Screening of Remedial Alternatives Technical Memorandum will be completed and submitted to EPA.

The approved scope of work for investigation of dichlorobenzenes in a localized area south of the Site and outside of the barrier wall will be implemented pending access from the NJDOT.

Monthly progress reports will continue to be prepared and submitted to EPA.

IV. Problems Encountered/Anticipated Delays

The Group has requested a thirty-day extension of the deadline to submit the Remedial Investigation Report to EPA.

V. Operations and Maintenance Information

Routine operations and maintenance activities were completed. A summary of operations and maintenance activities are provided on a quarterly-basis. The summary for the fourth quarter of 2014 is included as Appendix A of this monthly report.

APPENDIX A

1.0 DESCRIPTION OF ACTIVITIES COMPLETED

1.1 HYDRAULIC CONTROL TREATMENT SYSTEM (HCTS)

- Continued routine HCTS operation, monitoring, inspection and reporting efforts as summarized below:
  - Average monthly flows for October, November and December 2014 were 15.3 gpm, 19.4 gpm and 25.8 gpm, respectively. The total volume of water treated this reporting period was 2,677,201 gallons.
  - Monthly NJPDES sample collection pursuant to NJ Permit No. NJ0155438 was completed. There were no exceedances of permit monitored constituents noted during this period. Whole Effluent Toxicity (WET) via Method 1002.0 (Mysidopsis Bahia), was reported at IC_{25} >100% growth for the 2014 4th quarter monitoring event.
  - Water level gauging data collected during the reporting period from the piezometers, hydraulic control wells and DNAPL recovery wells are provided in Table 1. Water level data trends indicate inward gradients across the slurry wall which were maintained throughout the 4th Quarter of 2014, however seasonal increases in precipitation and subsequent infiltration are reflected in the gauging data. A graph showing historical groundwater gradient data is provided as Figure 1 of this submittal.

Figures 2 and 3 provide November 2014 potentiometric surface data (representing the most typical HCTS operational scenario for the reporting period), for both the shallow and deep monitoring zones respectively. Figure 2 shows pronounced gradients toward HCWs across the site within the shallow fill unit as well as a significant differential between inner and outer slurry wall piezometer pairs, indicating that the slurry wall is functioning as an effective hydraulic barrier. Potentiometric surface contours for the deep sand unit are provided on Figure 3. As indicated, the hydraulic gradient in the sand unit is essentially flat over the western half of the area enclosed by the barrier wall system. Slightly higher potentiometric surface elevations were measured on the unpaved Seaboard Site portion of the containment area, which could be indicative of localized recharge. Similar to the shallow unit, substantial differentials between the water levels inside and outside of the slurry wall exist which is an indication

of the lack of hydraulic communication and groundwater flux through the barrier wall in the deep sand unit.

Figures 4, 5 and 6 present graphs of the monthly (October, November and December 2014, respectively) water level measurements made in the shallow unit piezometers inside and outside of the slurry wall and the nearest hydraulic control well. The graphs show that hydraulic gradients inside the barrier wall continue to be inward toward the hydraulic control wells. The graphs also show substantial differentials continue to exist between the water levels inside and outside of the slurry wall. Such differentials are indicative of a lack of hydraulic communication between the fill unit inside and outside of the barrier wall and are demonstrative of the effective containment resulting from the low permeability barrier wall system.

1.2 DNAPL MEASUREMENT AND RECOVERY

- DNAPL measurements from recovery wells are provided in Table 2. DNAPL recovery efforts for the fourth quarter of 2014 produced 185 gallons of DNAPL. A total of 5,061 gallons of DNAPL have been recovered from the DNAPL recovery well network since January 2012. Total DNAPL recovery to date is provided in the summary table below.

Well ID	October 2014 DNAPL Recovery (gal)	November 2014 DNAPL Recovery (gal)	December 2014 DNAPL Recovery (gal)	Total DNAPL Recovered (gal)
DRWL-1	NR	NR	NR	359
DRWL-5	NR	NR	NR	349
DRWL-7	NR	NR	NR	50
DRWL-9	NR	NR	NR	879
DRWL-10	NR	NR	NR	108
DRWL-11	85	NR	100	3,316

1.3 NON-HCTS INSPECTIONS

- Continued post-construction inspections.

1.4 ADDITIONAL COMPLETED EFFORTS

- None to report this period

2.0 PROJECTED FUTURE ACTIVITIES

2.1 HCTS RELATED EFFORTS

- Continue routine HCTS operations, monitoring and maintenance.
- Continue dewatering of electrical pull boxes to assess and repair electrical runs from the HCTS building to individual HC and DR well control panels.
- Passive DNAPL recovery will continue.

2.2 NON-HCTS RELATED EFFORTS

- Routine Non-HCTS (consolidation area and IRM surface covers) inspections and maintenance will continue.
- Soil erosion areas and re-vegetation issues will be addressed, as necessary.
- Quarterly inspections of the surface cover systems and repair (as necessary) will continue.
- 2014 Wetland Mitigation Monitoring Report submittal.

TABLES

Table 1

Standard Chlorine Chemical Co., Inc.
4th Quarter 2014 Progress Report

HCTS Gauging Data Summary

Well ID	Top of Casing Elevation MSL (NAD 83)	Oct-14			Nov-14			Dec-14		
		Depth to Water (ft-TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)	Depth to Water (ft-TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)	Depth to Water (ft-TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)
HC-PZ-1U	11.18	7.26	16.70	3.92	6.92	16.70	4.26	6.30	16.71	4.88
HC-PZ-2U	11.32	7.66	16.11	3.66	7.24	16.05	4.08	6.10	16.05	5.22
HC-PZ-3U	10.33	9.53	14.99	0.80	8.09	14.98	2.24	6.03	14.98	4.30
HC-PZ-4U	10.16	7.79	14.60	2.37	5.43	14.58	4.73	3.21	14.58	6.95
HC-PZ-6U	7.15	3.70	9.40	3.45	1.61	9.43	5.54	1.15	9.43	6.00
HC-PZ-7U	6.51	2.75	8.93	3.76	0.89	8.89	5.62	0.21	8.90	6.30
HC-PZ-8U	7.75	3.61	11.90	4.14	2.7	11.88	5.05	0.14	11.89	7.61
HC-PZ-9U	8.18	2.98	12.20	5.20	1.83	12.19	6.35	2.02	12.20	6.16
HC-PZ-10U	6.05	5.08	9.51	0.97	4.18	9.51	1.87	3.19	9.52	2.86
HC-PZ-11U	6.3	4.91	9.81	1.39	4.54	9.80	1.76	4.43	9.77	1.87
HC-PZ-12U	5.35	3.97	8.44	1.38	2.87	8.45	2.81	2.44	8.45	2.91
HC-PZ-13U	4.76	3.40	8.40	1.36	2.4	8.40	2.65	1.85	8.40	2.91
HC-PZ-14U	6.03	3.30	10.05	2.73	2.13	10.05	3.90	2.17	10.05	3.86
HC-PZ-15U	8.28	5.82	11.73	2.46	4.93	11.75	3.35	4.56	11.73	3.72
HC-PZ-1L	11.48	8.50	25.10	2.98	7.89	25.10	3.59	7.53	25.10	3.95
HC-PZ-2L	12.15	9.25	23.91	2.90	8.96	23.84	3.19	8.72	23.82	3.43
HC-PZ-3L	9.97	6.92	23.53	3.05	5.4	23.52	4.57	5.40	23.52	4.57
HC-PZ-4L	9.17	6.93	20.55	2.24	6.84	20.55	2.33	5.25	20.52	3.92
HC-PZ-6L	6.06	3.48	16.88	2.58	3.42	16.85	2.64	3.02	16.85	3.04
HC-PZ-7L	5.5	1.51	17.00	3.99	1	16.98	4.50	0.87	16.98	4.63
HC-PZ-8L	8.3	4.80	21.48	3.50	3.61	21.50	4.69	2.94	21.50	5.36
HC-PZ-9L	8.57	3.60	21.00	4.97	2.73	20.98	5.84	3.25	20.98	5.32
HC-PZ-10L	5.8	3.74	18.75	2.06	3.14	18.75	2.66	2.21	18.75	3.59
HC-PZ-11L	6.91	5.29	19.09	1.62	4.88	19.10	2.03	4.69	19.10	2.22
HC-PZ-12L	5.07	2.74	15.75	2.33	1.79	15.75	3.47	1.48	15.75	3.59
HC-PZ-13L	4.77	3.35	16.19	1.42	2.8	16.20	2.33	2.36	16.22	2.41
HZ-PZ-14L	6.43	3.63	18.88	2.80	2.76	18.89	3.67	2.60	18.85	3.83
SC-MW-16L	8.02	5.24	19.81	2.78	4.77	19.80	3.25	4.37	19.83	3.65

Table 1

Standard Chlorine Chemical Co., Inc.
4th Quarter 2014 Progress Report

HCTS Gauging Data Summary

Well ID	Top of Casing Elevation MSL (NAD 83)	Oct-14			Nov-14			Dec-14		
		Depth to Water (ft-TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)	Depth to Water (ft-TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)	Depth to Water (ft-TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)
HCWU-1	10.30	6.52	13.61	3.78	11.58	13.56	-1.28	12.20	13.58	-1.90
HCWU-2	10.91	7.12	14.15	3.79	10.45	14.15	0.46	11.14	14.15	-0.23
HCWU-3	9.85	10.50	13.85	-0.65	9.75	13.88	0.10	12.33	13.86	-2.48
HCWU-4	8.54	7.04	12.95	1.50	7.68	12.95	0.86	7.15	12.95	1.39
HCWU-5	8.16	8.17	12.35	-0.01	7.82	12.30	0.34	5.55	12.32	2.61
HCWU-6	5.84	1.91	10.40	3.93	4.55	10.34	1.29	4.71	10.35	1.13
HCWU-7	5.52	4.89	8.73	0.63	5.05	8.74	0.47	4.88	8.72	0.64
HCWU-8	5.65	8.08	11.90	-2.43	6.69	11.88	-1.04	7.35	11.90	-1.70
HCWU-9	5.66	4.38	6.85	1.28	3.72	6.85	1.94	0.22	6.85	5.44
HCWU-10	4.28	4.21	7.59	0.07	3.02	7.60	1.26	3.43	7.60	0.85
HCWU-11	5.96	4.51	8.40	1.45	2.25	8.35	3.71	2.99	8.37	2.97
HCWU-12	5.26	4.28	8.33	0.98	6.02	8.10	-0.76	4.33	8.27	0.93
HCWU-13	4.14	5.06	7.85	-0.92	0.28	7.85	3.86	1.54	7.85	2.60
HCWU-14	2.95	-0.27	5.45	3.22	-0.82	5.45	3.77	-0.91	5.38	3.86
HCWU-15	4.44	4.61	8.78	-0.17	4.88	8.78	-0.44	5.54	8.78	-1.10
HCWU-16	3.98	4.60	8.50	-0.62	3.90	8.50	0.08	4.75	8.50	-0.77
HCWU-17	3.31	4.67	7.50	-1.36	-0.36	7.50	3.67	-0.26	7.50	3.57
HCWU-18	3.16	3.99	6.50	-0.83	-0.87	6.50	4.03	-0.54	6.50	3.70
HCWU-19	2.97	3.62	8.40	-0.65	-0.85	8.41	3.82	-0.93	8.39	3.90
HCWU-20	3.32	5.32	7.30	-2.00	3.14	7.28	0.18	5.02	7.30	-1.70
HCWU-21	13.41	12.38	17.09	1.03	13.62	17.00	-0.21	13.50	17.00	-0.09
HCWU-22	4.99	5.63	9.70	-0.64	4.22	9.73	0.77	4.61	9.71	0.38
HCWU-23	12.51	13.38	16.30	-0.87	12.90	16.28	-0.39	14.33	16.27	-1.82
HCWU-24	8.78	9.41	13.20	-0.63	7.92	13.19	0.86	7.57	13.20	1.21
HCWU-25	12.47	13.91	16.34	-1.44	14.37	16.35	-1.90	7.64	16.35	4.83
HCWU-26	9.58	12.38	14.40	-2.80	11.77	14.38	-2.19	12.45	14.40	-2.87

Table 1

Standard Chlorine Chemical Co., Inc.
4th Quarter 2014 Progress Report

HCTS Gauging Data Summary

Well ID	Top of Casing Elevation MSL (NAD 83)	Oct-14			Nov-14			Dec-14		
		Depth to Water (ft-TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)	Depth to Water (ft-TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)	Depth to Water (ft-TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)
DRWU-1	5.17	1.48	10.65	3.69	0.94	10.66	4.23	1.01	10.66	4.16
DRWU-2	5.63	1.91	11.79	3.72	1.31	11.78	4.32	1.43	11.78	4.20
DRWU-3	16.13	12.15	22.35	3.98	12.03	22.35	4.10	11.61	22.35	4.52
DRWU-4	4.71	0.94	12.15	3.77	0.11	12.15	4.60	0.47	12.15	4.24
DRWU-5	2.80	0.10	8.82	2.70	-1.12	8.82	3.92	-1.07	8.82	3.87
DRWL-1	7.35	3.55	31.90	3.80	2.98	31.90	4.37	2.72	31.90	4.63
DRWL-2	3.09	-0.09	26.95	3.18	0.77	26.95	2.32	-0.58	26.95	3.67
DRWL-3	3.87	1.00	28.87	2.87	0.12	28.87	3.75	0.02	28.87	3.85
DRWL-4	5.65	2.53	30.45	3.12	1.67	30.45	3.98	1.62	30.45	4.03
DRWL-5	5.74	1.25	29.65	4.49	-0.14	29.65	5.88	0.36	29.65	5.38
DRWL-6	17.36	14.01	40.82	3.35	13.19	40.82	4.17	13.03	40.82	4.33
DRWL-7	2.76	0.03	27.15	2.73	-1.08	27.15	3.84	-1.04	27.15	3.80
DRWL-8	3.17	0.54	28.65	2.63	-0.77	28.65	3.94	-0.75	28.65	3.92
DRWL-9	4.69	1.36	28.30	3.33	0.47	28.30	4.22	0.48	28.30	4.21
DRWL-10	6.46	4.13	30.60	2.33	3.16	30.60	3.30	2.81	30.60	3.65
DRWL-11	9.05	6.75	33.15	2.30	5.70	33.15	3.35	5.37	33.15	3.68

Table 2

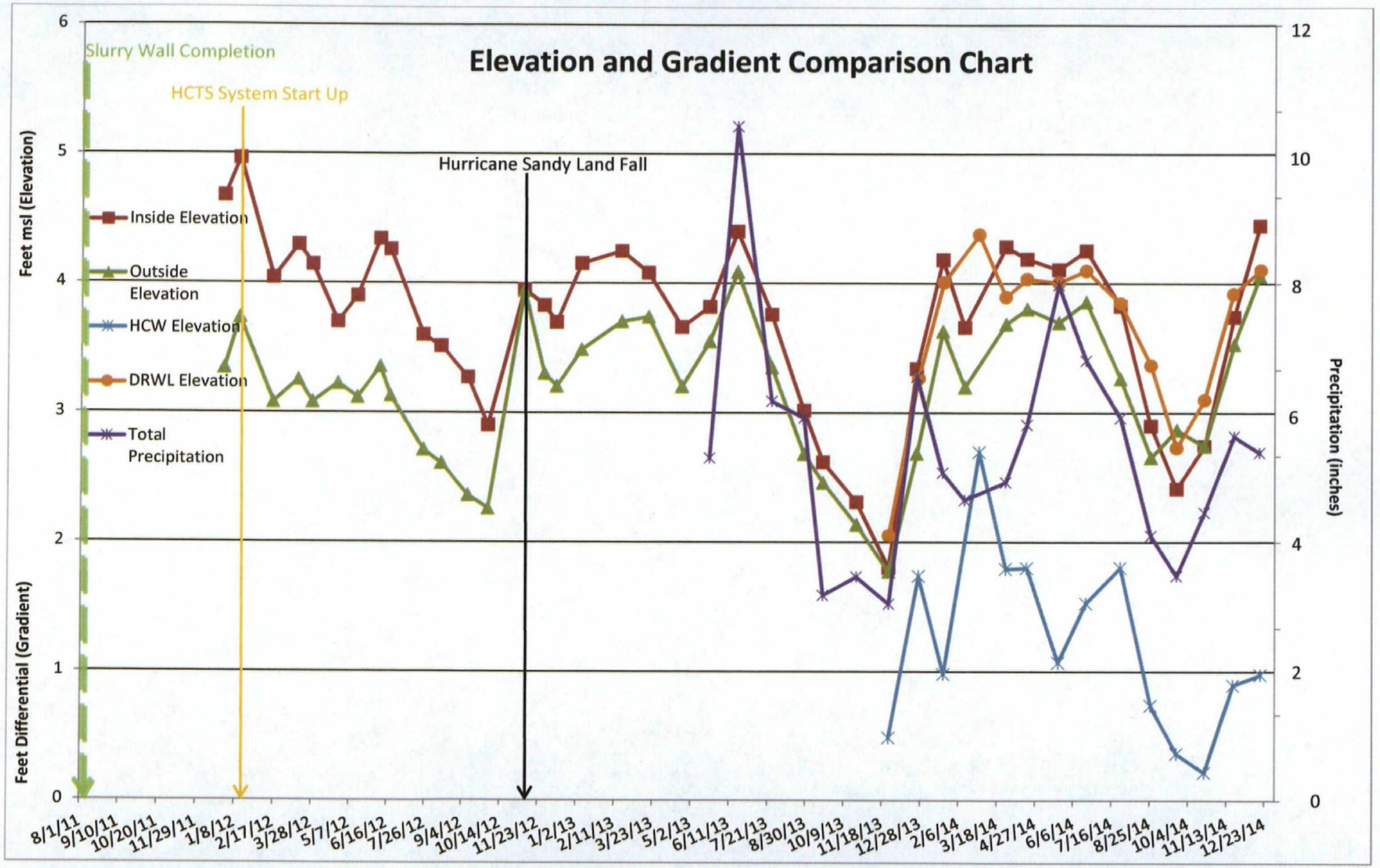
Standard Chlorine Chemical Co., Inc.
4th Quarter 2014 Progress Report
DNAPL Summary

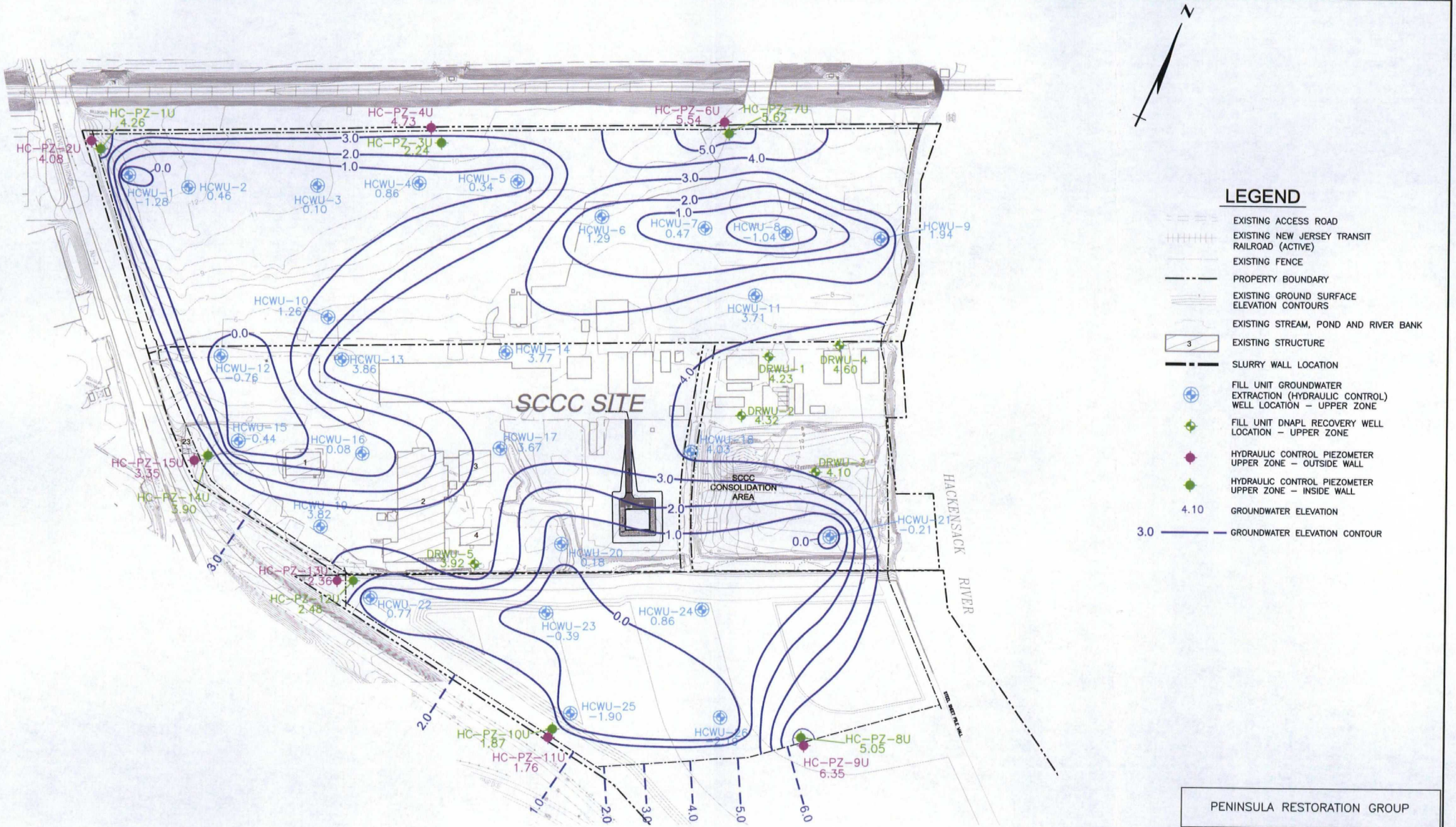
Well ID	Oct-14				Nov-14				Dec-14			
	Depth to Water (ft-TOC)	Depth to DNAPL (ft-TOC)	Total Depth (ft- TOC)	DNAPL Thickness (ft)	Depth to Water (ft-TOC)	Depth to DNAPL (ft-TOC)	Total Depth (ft- TOC)	DNAPL Thickness (ft)	Depth to Water (ft-TOC)	Depth to DNAPL (ft-TOC)	Total Depth (ft- TOC)	DNAPL Thickness (ft)
DRWU-1	1.48	10.65	10.65	Trace	0.94	10.66	10.66	Trace	1.01	10.66	10.66	Trace
DRWU-2	1.91	NP	11.79	NP	1.31	NP	11.78	NP	1.43	NP	11.78	NP
DRWU-3	12.15	22.15	22.35	0.20	12.03	22.15	22.35	0.20	11.61	22.15	22.35	0.20
DRWU-4	0.94	12.15	12.15	Trace	0.11	12.15	12.15	Trace	0.47	12.15	12.15	Trace
DRWU-5	0.10	NP	8.82	NP	-1.12	NP	8.82	NP	-1.07	NP	8.82	NP
DRWL-1	3.55	30.90	31.90	1.00	2.98	30.40	31.90	1.50	2.72	29.75	31.90	2.15
DRWL-2	-0.09	NP	26.95	NP	0.77	NP	26.95	NP	-0.58	NP	26.95	NP
DRWL-3	1.00	28.87	28.87	Trace	0.12	28.87	28.87	Trace	0.02	28.87	28.87	Trace
DRWL-4	2.53	30.45	30.45	Trace	1.67	30.45	30.45	Trace	1.62	30.45	30.45	Trace
DRWL-5	1.25	28.60	29.65	1.05	-0.14	28.55	29.65	1.10	0.36	28.52	29.65	1.13
DRWL-6	14.01	NP	40.82	NP	13.19	NP	40.82	NP	13.03	NP	40.82	NP
DRWL-7	0.03	26.65	27.15	0.50	-1.08	26.65	27.15	0.50	-1.04	26.65	27.15	0.50
DRWL-8	0.54	NP	28.65	NP	-0.77	NP	28.65	NP	-0.75	NP	28.65	NP
DRWL-9	1.36	26.50	28.30	1.80	0.47	26.35	28.30	1.95	0.48	26.10	28.30	2.20
DRWL-10	4.13	29.25	30.60	1.35	3.16	28.75	30.60	1.85	2.81	28.35	30.60	2.25
DRWL-11	6.75	27.05	33.15	6.10	5.70	29.35	33.15	3.80	5.37	26.80	33.15	6.35

ft-TOC: feet below top of casing.
NP: no product detected

FIGURES

Figure 1
Standard Chlorine Chemical Company
4th Quarter 2014 Progress Report





LEGEND

- EXISTING ACCESS ROAD
- EXISTING NEW JERSEY TRANSIT RAILROAD (ACTIVE)
- EXISTING FENCE
- PROPERTY BOUNDARY
- EXISTING GROUND SURFACE ELEVATION CONTOURS
- EXISTING STREAM, POND AND RIVER BANK
- EXISTING STRUCTURE
- SLURRY WALL LOCATION
- FILL UNIT GROUNDWATER EXTRACTION (HYDRAULIC CONTROL) WELL LOCATION – UPPER ZONE
- FILL UNIT DNAPL RECOVERY WELL LOCATION – UPPER ZONE
- HYDRAULIC CONTROL PIEZOMETER UPPER ZONE – OUTSIDE WALL
- HYDRAULIC CONTROL PIEZOMETER UPPER ZONE – INSIDE WALL
- 4.10 GROUNDWATER ELEVATION
- 3.0 GROUNDWATER ELEVATION CONTOUR

REV #	DATE	DESCRIPTION	APPD
1			
2			
3			

REFERENCE: EXISTING GROUND SURFACE CONTOURS PER AIR SURVEY, DULLES, VIRGINIA, APRIL 14, 2001. HORIZONTAL REFERENCE: NEW JERSEY STATE PLANE COORDINATES (NAD 1927). VERTICAL REFERENCE: NATIONAL GEODETIC VERTICAL DATUM (NGVD 1929).

ISSUE DATE:

KEY ENVIRONMENTAL, INC.
200 THIRD AVENUE
CARNEGIE, PA 15106

PENINSULA RESTORATION GROUP

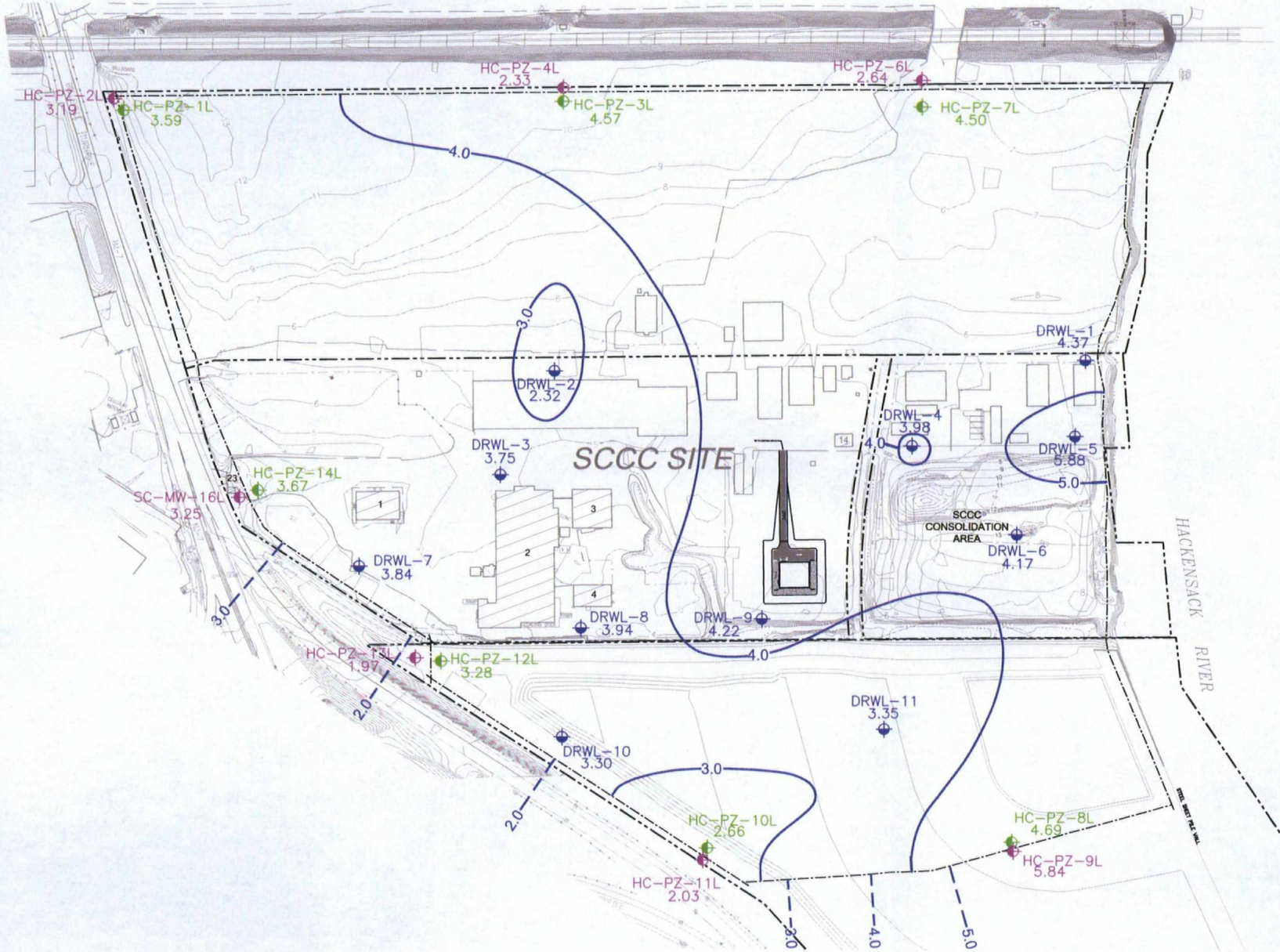
DRWN: SCC	DATE: 01/21/15	KEY ENVIRONMENTAL INCORPORATED
CHKD: RMW	DATE: 01/21/15	
APPD: JSZ	DATE: 01/21/15	
SCALE: AS SHOWN		

SCCC SITE
KEARNY, NEW JERSEY

GROUNDWATER ELEVATION CONTOURS
SURFICIAL FILL UNIT– NOVEMBER 2014

PROJECT NO: 2014

FIGURE 2



N

LEGEND

- EXISTING ACCESS ROAD
- EXISTING NEW JERSEY TRANSIT RAILROAD (ACTIVE)
- EXISTING FENCE
- PROPERTY BOUNDARY
- EXISTING GROUND SURFACE ELEVATION CONTOURS
- EXISTING STREAM, POND AND RIVER BANK
- SLURRY WALL LOCATION
- SAND UNIT DNAPL RECOVERY WELL LOCATION – LOWER ZONE
- HYDRAULIC CONTROL PIEZOMETER LOWER ZONE – OUTSIDE WALL
- HYDRAULIC CONTROL PIEZOMETER LOWER ZONE – INSIDE WALL
- 3.98 GROUNDWATER ELEVATION
- 4.0 GROUNDWATER ELEVATION CONTOUR

0 120 240 FEET

REV #	DATE	DESCRIPTION	APPD
1			
2			
3			

REFERENCE: EXISTING GROUND SURFACE CONTOURS PER AIR SURVEY, DULLES, VIRGINIA, APRIL 14, 2001. HORIZONTAL REFERENCE: NEW JERSEY STATE PLANE COORDINATES (NAD 1927). VERTICAL REFERENCE: NATIONAL GEODETIC VERTICAL DATUM (NGVD 1929).

ISSUE DATE:

KEY ENVIRONMENTAL, INC.
200 THIRD AVENUE
CARNEGIE, PA 15106

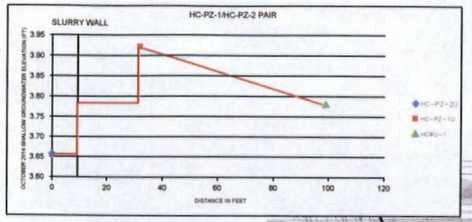
PENINSULA RESTORATION GROUP

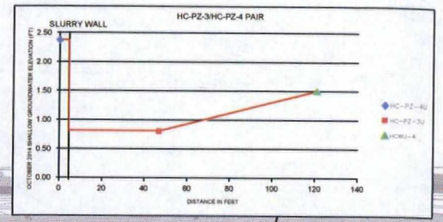
DRWN: SCC	DATE: 01/21/15	KEY ENVIRONMENTAL INCORPORATED
CHKD: RMW	DATE: 01/21/15	
APPD: JSZ	DATE: 01/21/15	
SCALE: AS SHOWN		

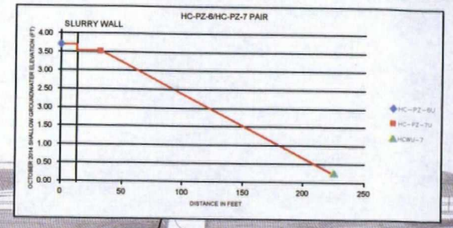
SCCC SITE
KEARNY, NEW JERSEY

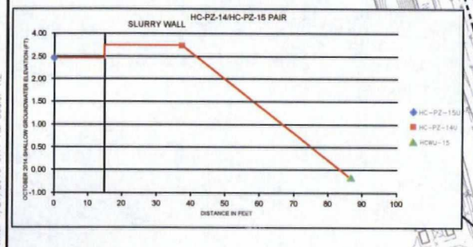
GROUNDWATER ELEVATION CONTOURS
DEEP SAND UNIT – NOVEMBER 2014

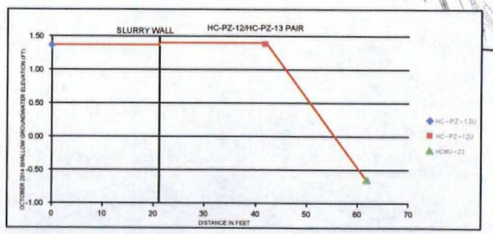
PROJECT NO: 2014
FIGURE 3

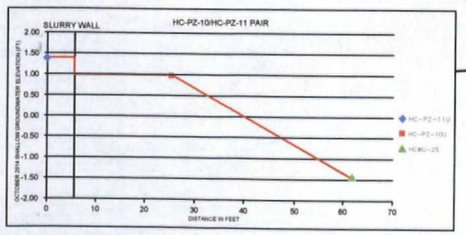


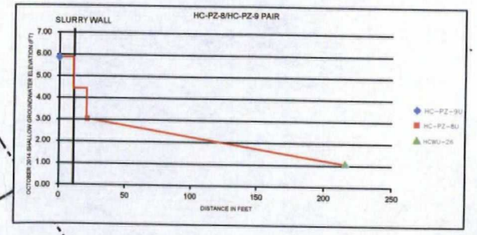












LEGEND

- EXISTING ACCESS ROAD
- EXISTING NEW JERSEY TRANSIT RAILROAD (ACTIVE)
- EXISTING FENCE
- EXISTING WATER LINE
- EXISTING STORM DRAIN
- EXISTING STORM SEWER
- EXISTING GAS LINE
- EXISTING OVERHEAD POWER LINE
- PROPERTY BOUNDARY
- EXISTING CONCRETE PAD
- EXISTING GROUND SURFACE ELEVATION CONTOURS
- EXISTING VEGETATION
- EXISTING STREAM, POND AND RIVER BANK
- EXISTING ELEVATION (FEET–MSL)
- EXISTING STRUCTURE
- SLURRY WALL LOCATION
- STEEL SHEET PILE WALL LOCATION
- FILL UNIT GROUNDWATER EXTRACTION (HYDRAULIC CONTROL) WELL LOCATION
- FILL UNIT DNAPL RECOVERY WELL LOCATION
- SAND UNIT DNAPL RECOVERY WELL LOCATION
- HC–PZ–9U HYDRAULIC CONTROL PIEZOMETER UPPER ZONE (APPROX.)
- HC–PZ–9L HYDRAULIC CONTROL PIEZOMETER LOWER ZONE (APPROX.)

REV #	DATE	DESCRIPTION	APPD
3			
2			
1			

REFERENCE: EXISTING GROUND SURFACE CONTOURS PER AIR SURVEY, DULLES, VIRGINIA, OCTOBER 14, 2001. HORIZONTAL REFERENCE: NEW JERSEY STATE PLANE COORDINATES (NAD 1927). VERTICAL REFERENCE: NATIONAL GEODETIC VERTICAL DATUM (NGVD 1929).

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KEY ENVIRONMENTAL, INC.
200 THIRD AVENUE
CARNEGIE, PA 15106

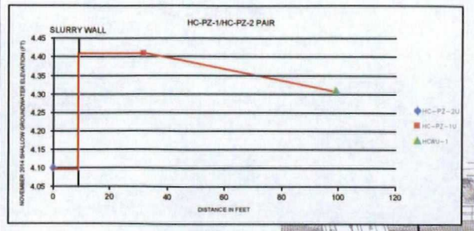
PENINSULA RESTORATION GROUP

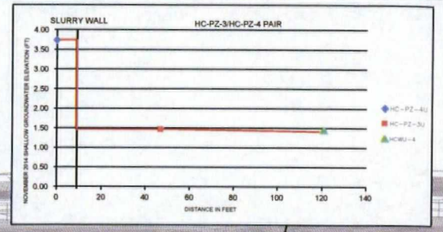
DRWN: SCC	DATE: 01/21/15	KEY ENVIRONMENTAL INCORPORATED
CHKD: RWW	DATE: 01/21/15	
APPD: JSZ	DATE: 01/21/15	
SCALE: AS SHOWN		

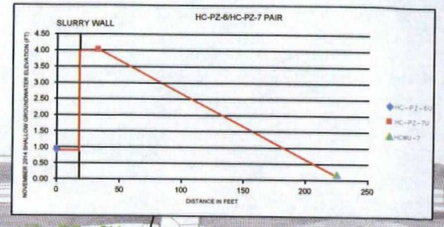
SCCC SITE
KEARNY, NEW JERSEY

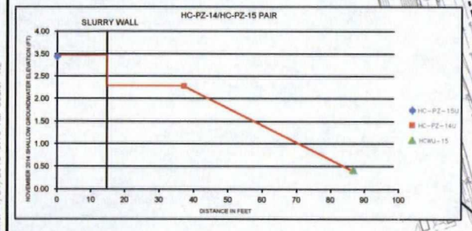
GROUNDWATER GRAPHS
OCTOBER 2014

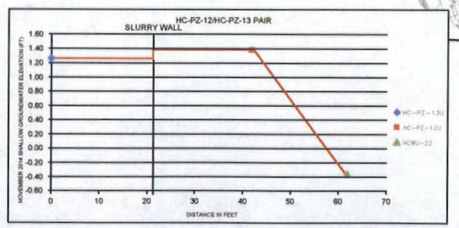
PROJECT NO: 2013–02
FIGURE 4

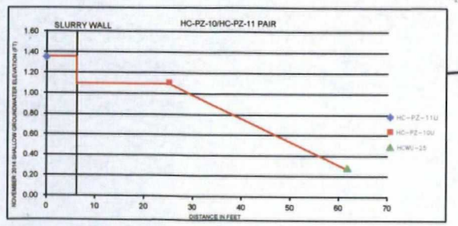


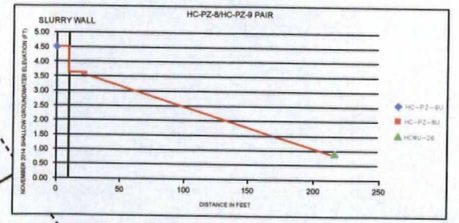












LEGEND

- EXISTING ACCESS ROAD
- EXISTING NEW JERSEY TRANSIT RAILROAD (ACTIVE)
- EXISTING FENCE
- EXISTING WATER LINE
- EXISTING STORM DRAIN
- EXISTING STORM SEWER
- EXISTING GAS LINE
- EXISTING OVERHEAD POWER LINE
- PROPERTY BOUNDARY
- EXISTING CONCRETE PAD
- EXISTING GROUND SURFACE ELEVATION CONTOURS
- EXISTING VEGETATION
- EXISTING STREAM, POND AND RIVER BANK
- EXISTING ELEVATION (FEET–MSL)
- 3 EXISTING STRUCTURE
- SLURRY WALL LOCATION
- STEEL SHEET PILE WALL LOCATION
- FILL UNIT GROUNDWATER EXTRACTION (HYDRAULIC CONTROL) WELL LOCATION
- FILL UNIT DNAPL RECOVERY WELL LOCATION
- SAND UNIT DNAPL RECOVERY WELL LOCATION
- HC-PZ-9U HYDRAULIC CONTROL PIEZOMETER UPPER ZONE (APPROX.)
- HC-PZ-9L HYDRAULIC CONTROL PIEZOMETER LOWER ZONE (APPROX.)

NOTE:
HCWU-3, 7, 8, 9, 11, 12 AND 13 WERE OFFLINE AT THE TIME OF WATER LEVEL MEASUREMENTS.

REV #	DATE	DESCRIPTION	APPD
3			
2			
1			

REFERENCE: EXISTING GROUND SURFACE CONTOURS PER AIR SURVEY, DULLES, VIRGINIA, APRIL 14, 2001. HORIZONTAL REFERENCE: NEW JERSEY STATE PLANE COORDINATES (NAD 1927). VERTICAL REFERENCE: NATIONAL GEODETIC VERTICAL DATUM (NGVD 1929).

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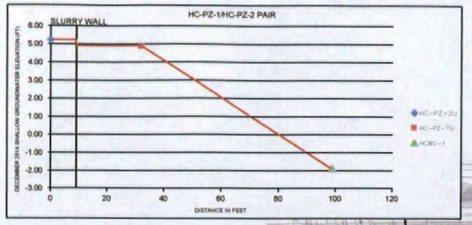
SCALE: AS SHOWN		

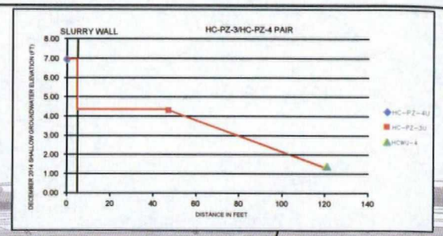
SCCC SITE
KEARNY, NEW JERSEY

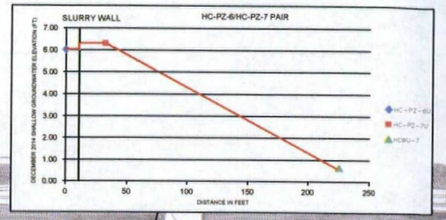
GROUNDWATER GRAPHS
NOVEMBER 2014

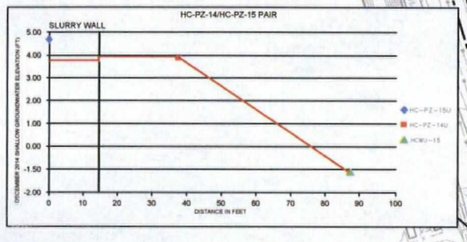
PROJECT NO: 2013–02
FIGURE 5

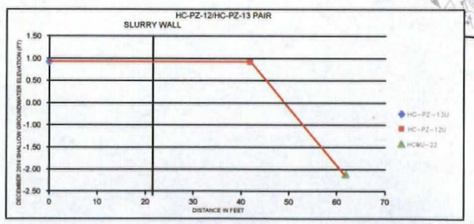
x:\00cad\kearny\2014 groundwater monitoring\november results\figure 5 site location with graphs.dwg Last Saved By: Scomer 1/16/2015 3:03 PM Plotted By: Shelly Comer 1/21/2015 9:16 AM Scale: 1:2

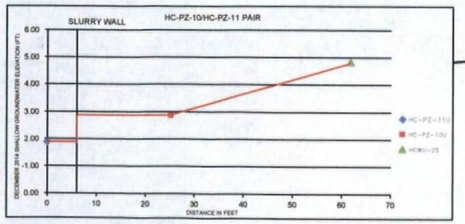


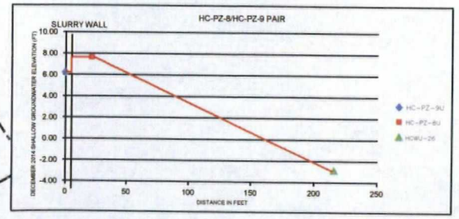


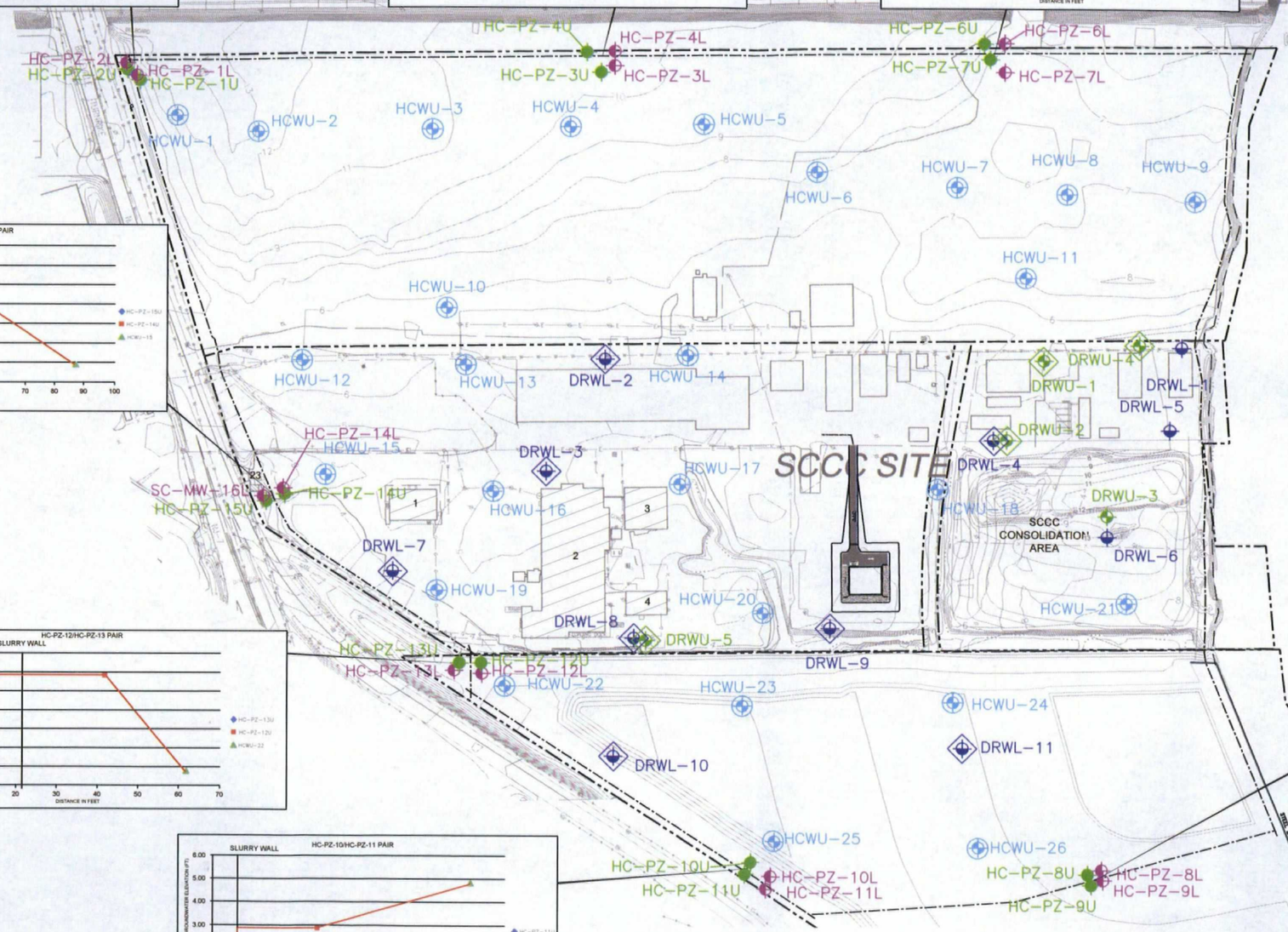












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NOTE:
HCWU–7, 8, 9, AND 11 WERE OFFLINE AT THE TIME OF WATER LEVEL MEASUREMENTS.

0 120 240 FEET

REV #	DATE	DESCRIPTION	APPD
1			
2			
3			

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APPD: JSZ	DATE: 01/21/15	
SCALE:	AS SHOWN	

SCCC SITE
KEARNY, NEW JERSEY

GROUNDWATER GRAPHS
DECEMBER 2014

PROJECT NO: 2013–02
FIGURE 6